

# **BSA New Zealand All District Health Board Coverage Report**

For the period ending  
30 September 2019

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## Introduction

BreastScreen Aotearoa (BSA) is a national public health screening programme funded by the Government to offer free Mammography every two years to women aged 45–69 years of age. The aim of BSA is to reduce morbidity and mortality from breast cancer by the early detection and treatment of the disease.

BSA's target is to screen 70 percent of eligible women aged 50–69 every two years.

Improving uptake of the breast cancer screening programme by Māori and Pacific women is a key priority of the National Screening Unit (NSU) as part of its commitment to achieving equity. Coverage rates are monitored closely for these two groups who are known to be at increased risk of developing breast cancer and have significantly higher mortality rates from breast cancer. From September 2018 the NSU has added the number of Asian women screened by DHB and the eligible population to the quarterly reports (tables 4 and 5). While Asian women are not at increased risk of developing breast cancer, it is important to monitor the rate of screening in this group to understand screening behaviours.

While the majority (15) of District Health Boards (DHBs) are not directly contracted by the Ministry of Health to provide breast screening services, it is expected that all DHBs will have linkages to breast screening activities. The programme is delivered throughout the country by eight lead providers, their sub-contracted providers (where applicable), and mobile units that deliver services to rural and some urban communities. Working alongside the lead providers are 13 screening support service providers in defined geographical areas providing recruitment and retention, and support services for Māori, Pacific and other priority group women.

Women who screen regularly have a lower risk of dying from breast cancer than those who screen less regularly. Rescreening rates are calculated as the number of women rescreened within 20-27 months of their previous screen as a percentage of the number of women eligible for a rescreen. Where a woman has more than one screening episode recorded in a screening period, only the last episode is reported. This may result in variances when women's screens and rescreens are completed by different providers.

BSA monitor initial and subsequent screening rates. Initial rescreens are the proportion of women who have a screening mammogram within 20-27 months after their first screening appointment. There has been a decline in the proportion of women being rescreened within 27 months of their first mammogram and from September 2018 the initial rescreen rates were included in the quarterly DHB reports (page 7).

Numerator: Women screened in the 24 months period preceding the report end date and who are eligible for rescreening and returned for a rescreen within 20-27 months. (1 July 2017 to 30 September 2019)

Denominator: Women screened in the 24 months period preceding the report end date who are eligible for rescreening. (1 July 2015 to 30 June 2017).

The purpose of this quarterly report is to demonstrate by DHB if the programme coverage and rescreening targets are being met for the region.

## Technical notes

The data for the period ending 30 September 2019 was extracted from the national BreastScreen Aotearoa database (the Database) on 24 October 2019.

Screened women are included in the coverage calculations based on their age at the time of their screen. This means that coverage for women aged 50–69 years includes women who may have turned 70 or 71 during the monitoring period.

For both women screened and in the denominator, women have been prioritised to a single ethnicity using the following priority order: Māori, Pacific, Other. This means that if a woman chooses more than one category, and one of these is Māori, she is counted as Māori. For screened women with no ethnicity recorded in the Database, her screen contributes to overall coverage but not to any particular ethnicity. This means that the total number of women screened may be greater than the sum of women screened by ethnicity.

The denominators used for calculating coverage for the periods ending 30 September 2017, 30 September 2018 and 30 September 2019 are derived from Statistics New Zealand's District Health Board (DHB) population projections 30 June 2018 update, based on the 2013 Census.

From December 2016, the National Screening Unit (NSU) began reporting using the latest 2013 domicile codes and daily data loading process, compared to previous reports which used a monthly data loading process and were based on 2006 domicile codes. The denominator is the projected population for the mid-point of the monitoring period.

This means that for the two-year period ending:

- 30 September 2017, the denominator is the projected population for 30 September 2016
- 30 September 2018, the denominator is the projected population for 30 September 2017
- 30 September 2019, the denominator is the projected population for 30 September 2018

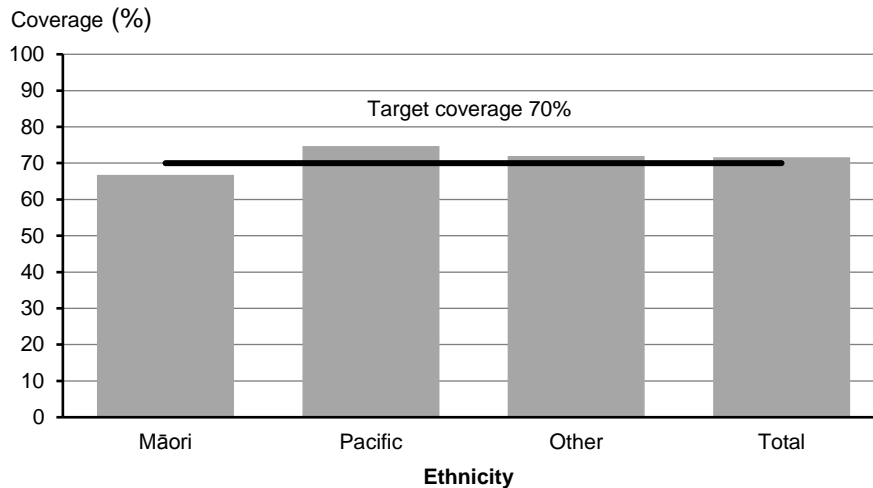
Delivery of BSA services through mobile units may also result in fluctuations of some ethnicities in some regions in the number of women screened in a quarter. This may have an impact on coverage from year to year depending on the mobile unit schedule.

Additional detail on the methodology can be obtained via a request made to [screening@moh.govt.nz](mailto:screening@moh.govt.nz).

# All coverage

## All coverage by ethnicity in the two years ending 30 September 2019

**Figure 1: BSA coverage (%) in the two years ending 30 September 2019 by ethnicity, women aged 50–69 years, Total Coverage**



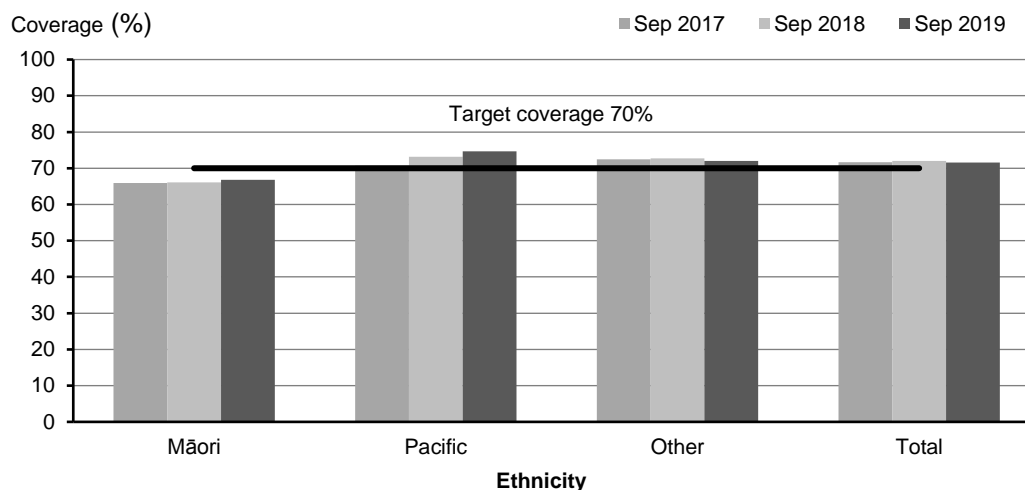
**Table 1: BSA coverage (%) in the two years ending 30 September 2019 by ethnicity, women aged 50–69 years, Total Coverage**

Ethnicity	Population	Women screened in last 2 years	2-year coverage	Additional screens to reach target*
Māori	65,752	43,913	66.80%	2,113
Pacific	25,976	19,404	74.70%	
Other	497,106	357,779	72.00%	
Unspecified		298		
<b>Total</b>	<b>588,834</b>	<b>421,394</b>	<b>71.60%</b>	

\*For the total population the number of additional screens is the number required to move from the total population coverage to 70%. This may not be the same as the sum of additional screens required for each ethnic group to reach 70%.

## All coverage trends by ethnicity

**Figure 2: BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2017, 2018 and 2019 by ethnicity, Total Coverage**



**Table 2: BSA number of screens in women aged 50–69 years by ethnicity and quarter, Quarter 3 2018 –Quarter 3 2019**

Ethnicity	Number of screens by quarter				
	Q3 (Jul - Sep) 2018	Q4 (Oct - Dec) 2018	Q1 (Jan-Mar) 2019	Q2 (Apr - Jun) 2019	Q3 (Jul - Sep) 2019
Māori	5,609	6,635	5,678	6,372	6,817
Pacific	2,513	3,233	2,535	2,732	2,933
Other	52,630	50,287	42,019	48,874	52,147
<b>Total</b>	<b>60,752</b>	<b>60,155</b>	<b>50,232</b>	<b>57,978</b>	<b>61,897</b>

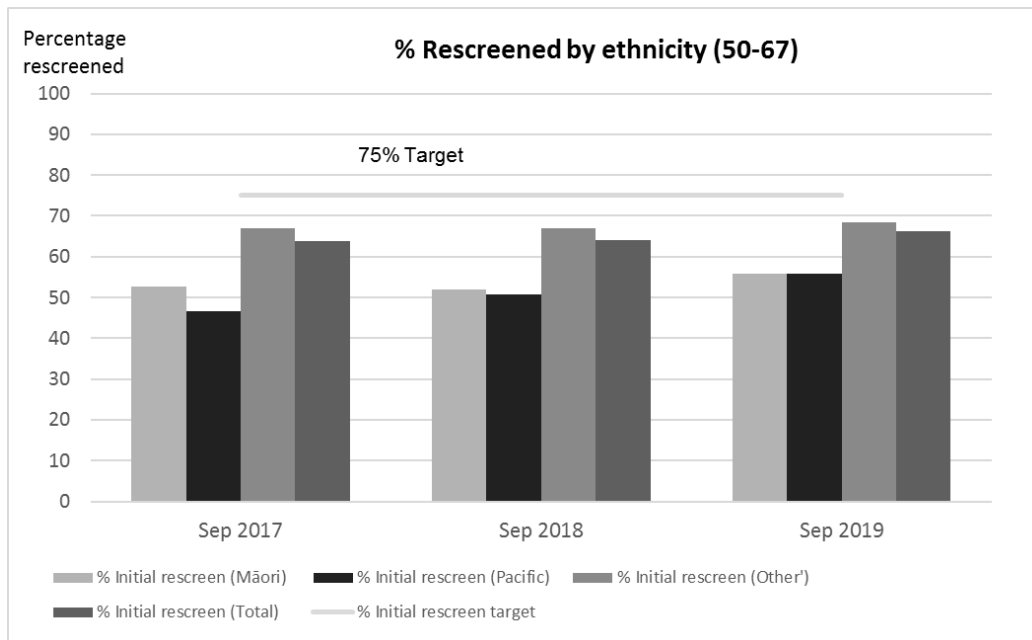


## Number of Initial Rescreens by Ethnicity

**Table 3: BSA number of eligible screens and initial rescreens for women aged 50–67 years by ethnicity for the rescreen period 1 July 2017 to 30 September 2019 (eligible period 1 July 2015 to 30 June 2017)**

Ethnicity	Number of eligible screens	Number of initial rescreens	%	CI (95%)
Māori	1,864	1,042	55.9%	(53.6, 58.2)
Pacific	834	465	55.8%	(52.3, 59.2)
Other	12,674	8,659	68.3%	(67.5, 69.1)
<b>Total</b>	<b>15,372</b>	<b>10,166</b>	<b>66.1%</b>	<b>(65.4, 66.9)</b>

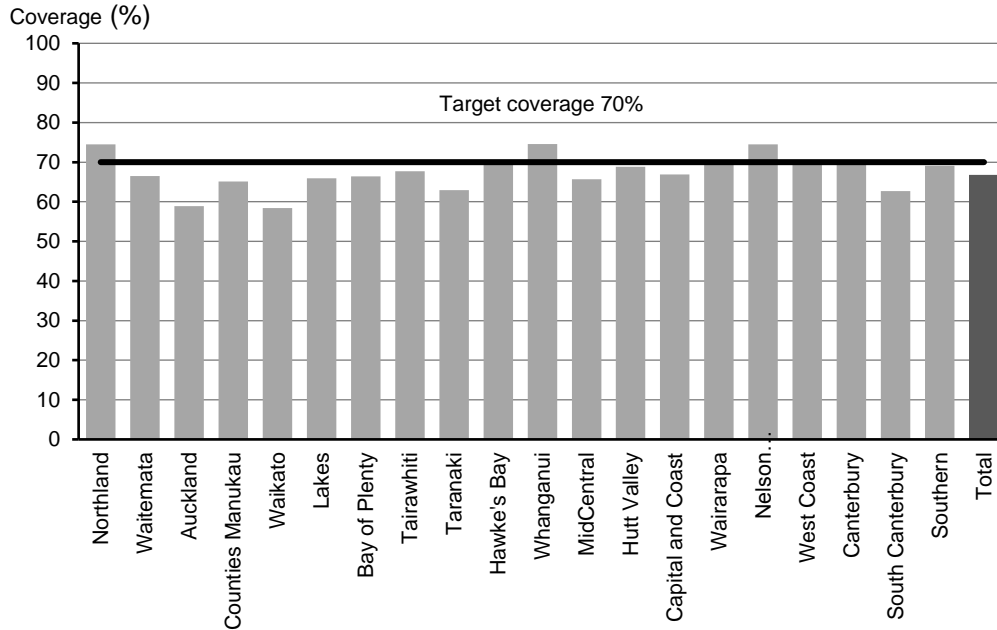
**Figure 3: BSA number of initial eligible rescreens by ethnicity**



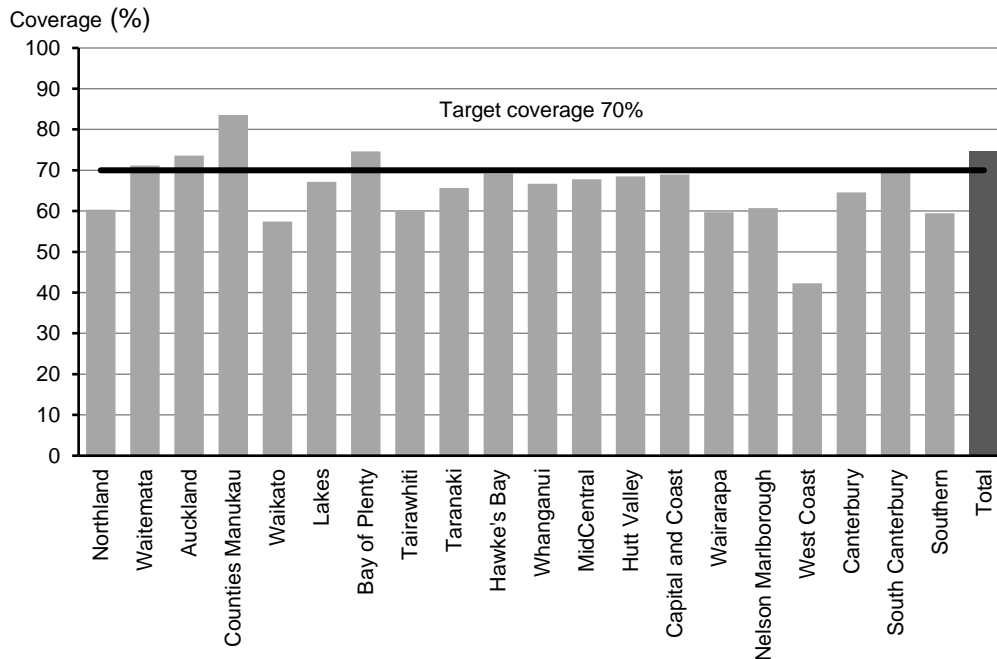
# DHB coverage comparisons

## DHB coverage by ethnicity in the two years ending 30 September 2019

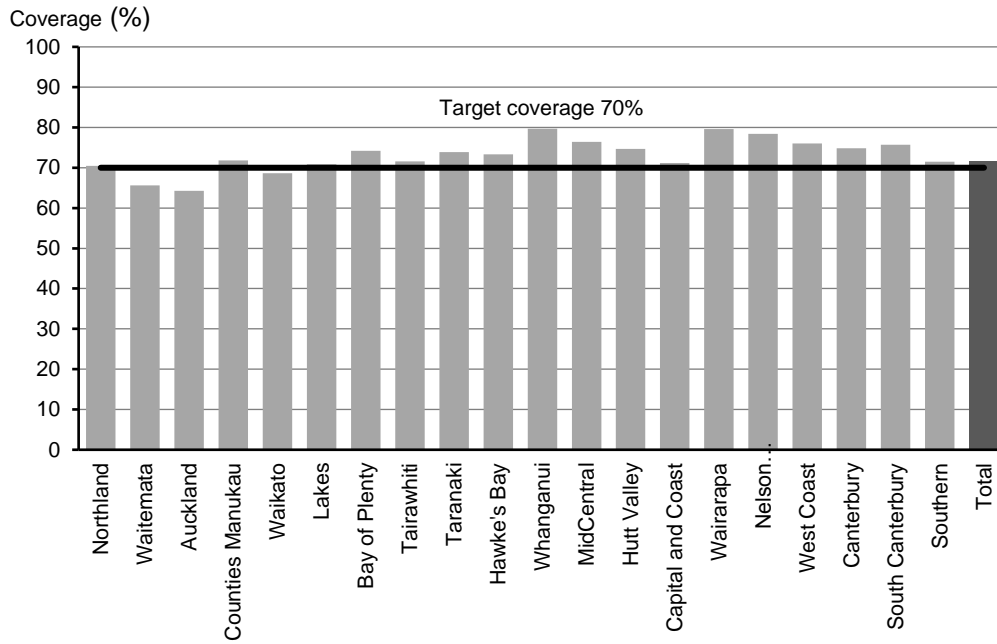
**Figure 4: BSA coverage (%) of Māori women aged 50–69 years in the two years ending 30 September 2019 by District Health Board**



**Figure 5: BSA coverage (%) of Pacific women aged 50–69 years in the two years ending 30 September 2019 by District Health Board**



**Figure 6: Overall BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2019 by District Health Board**



**Table 4: BSA number of screens and coverage (%) in women aged 50–69 years in the two years ending 30 September 2019 by District Health Board**

DHB	Eligible Population					Screens						Coverage				
	Māori	Pacific	Asian	Other	Total	Māori	Pacific	Asian	Other	Unspec.	Total	Māori	Pacific	Asian	Other	Total
Northland	6,049	348	1,006	17,786	25,189	4,506	210	447	12,590	9	17,762	74.5%	60.3%	44.4%	70.8%	70.5%
Waitemata	4,932	3,741	14,719	49,146	72,538	3,279	2,663	9,829	31,822	15	47,608	66.5%	71.2%	66.8%	64.7%	65.6%
Auckland	3,831	5,041	16,619	29,418	54,909	2,258	3,709	10,818	18,476	26	35,287	58.9%	73.6%	65.1%	62.8%	64.3%
Counties Manukau	7,008	9,553	16,141	27,184	59,886	4,559	7,990	10,480	19,935	6	42,970	65.1%	83.6%	64.9%	73.3%	71.8%
Waikato	7,946	958	4,005	36,936	49,845	4,643	550	1,982	26,992	10	34,177	58.4%	57.4%	49.5%	73.1%	68.6%
Lakes	3,621	244	941	9,013	13,819	2,385	164	403	6,837	2	9,791	65.9%	67.2%	42.8%	75.9%	70.9%
Bay of Plenty	5,478	291	1,771	23,774	31,314	3,636	217	750	18,636	8	23,247	66.4%	74.6%	42.3%	78.4%	74.2%
Tairāwhiti	2,461	107	132	3,358	6,058	1,666	64	67	2,538	1	4,336	67.7%	59.8%	50.8%	75.6%	71.6%
Taranaki	1,866	108	563	12,816	15,353	1,174	71	249	9,849	10	11,353	62.9%	65.7%	44.2%	76.8%	73.9%
Hawke's Bay	3,739	426	906	17,408	22,479	2,630	295	426	13,111	19	16,481	70.3%	69.2%	47.0%	75.3%	73.3%
Whanganui	1,629	126	326	6,624	8,705	1,216	84	134	5,503	4	6,941	74.6%	66.7%	41.1%	83.1%	79.7%
MidCentral	2,866	388	1,481	17,744	22,479	1,883	263	774	14,253	9	17,182	65.7%	67.8%	52.3%	80.3%	76.4%
Hutt Valley	2,163	1,008	2,204	12,978	18,353	1,488	690	1,440	10,080	11	13,709	68.8%	68.5%	65.3%	77.7%	74.7%
Capital and Coast	2,881	2,008	5,077	26,196	36,162	1,927	1,386	2,874	19,531	38	25,756	66.9%	69.0%	56.6%	74.6%	71.2%
Wairarapa	706	72	178	5,526	6,482	497	43	102	4,510	8	5,160	70.4%	59.7%	57.3%	81.6%	79.6%
Nelson Marlborough	1,408	168	708	19,934	22,218	1,049	102	318	15,934	24	17,427	74.5%	60.7%	44.9%	79.9%	78.4%
West Coast	409	26	100	4,181	4,716	287	11	54	3,214	17	3,583	70.2%	42.3%	54.0%	76.9%	76.0%
Canterbury	3,788	950	5,801	58,214	68,753	2,668	614	2,827	45,290	48	51,447	70.4%	64.6%	48.7%	77.8%	74.8%
South Canterbury	429	40	253	7,851	8,573	269	28	74	6,116	2	6,489	62.7%	70.0%	29.2%	77.9%	75.7%
Southern	2,542	373	2,059	36,029	41,003	1,756	222	731	26,597	31	29,337	69.1%	59.5%	35.5%	73.8%	71.5%
Unspecified DHB						137	28	136	1,050	0	1,351					
<b>National</b>	<b>65,752</b>	<b>25,976</b>	<b>74,990</b>	<b>422,116</b>	<b>588,834</b>	<b>43,913</b>	<b>19,404</b>	<b>44,915</b>	<b>312,864</b>	<b>298</b>	<b>421,394</b>	<b>66.8%</b>	<b>74.7%</b>	<b>59.9%</b>	<b>74.2%</b>	<b>71.6%</b>

## DHB coverage comparison trends by ethnicity

**Table 5: BSA coverage (%) of women aged 50–69 years in the two years ending 30 September 2017, 2018, 2019 by ethnicity and District Health Board**

DHB	Māori			Pacific			Asian			Other			Total		
	Sep 2017	Sep 2018	Sep 2019	Sep 2017	Sep 2018	Sep 2019	Sep 2017	Sep 2018	Sep 2019	Sep 2017	Sep 2018	Sep 2019	Sep 2017	Sep 2018	Sep 2019
Northland	72.1%	70.5%	74.5%	63.7%	60.8%	60.3%	46.9%	46.0%	44.4%	72.6%	70.7%	69.4%	72.4%	70.6%	70.5%
Waitemata	65.0%	63.8%	66.5%	67.5%	67.5%	71.2%	67.1%	66.3%	66.8%	65.8%	64.9%	65.2%	65.8%	65.0%	65.6%
Auckland	58.2%	59.1%	58.9%	68.3%	69.7%	73.6%	67.0%	65.6%	65.1%	63.0%	62.9%	63.6%	63.2%	63.3%	64.3%
Counties Manukau	65.8%	66.4%	65.1%	77.6%	83.1%	83.6%	64.2%	65.3%	64.9%	68.5%	69.9%	70.2%	69.6%	71.6%	71.8%
Waikato	58.8%	59.5%	58.4%	57.2%	59.0%	57.4%	49.7%	50.3%	49.5%	71.0%	71.3%	70.8%	68.9%	69.3%	68.6%
Lakes	65.2%	65.0%	65.9%	64.6%	63.9%	67.2%	46.7%	46.1%	42.8%	73.4%	72.6%	72.7%	71.2%	70.5%	70.9%
Bay of Plenty	59.9%	62.8%	66.4%	66.5%	69.3%	74.6%	39.5%	41.7%	42.3%	71.8%	74.1%	75.9%	69.7%	72.1%	74.2%
Tairāwhiti	68.5%	67.5%	67.7%	64.1%	55.4%	59.8%	57.9%	55.6%	50.8%	73.7%	73.8%	74.6%	71.5%	71.0%	71.6%
Taranaki	63.1%	60.2%	62.9%	63.5%	66.3%	65.7%	47.0%	43.7%	44.2%	76.5%	76.0%	75.5%	74.9%	74.1%	73.9%
Hawke's Bay	69.2%	70.9%	70.3%	67.2%	67.2%	69.2%	53.0%	50.2%	47.0%	74.6%	74.5%	73.9%	73.7%	73.9%	73.3%
Whanganui	70.6%	74.6%	74.6%	66.4%	66.7%	66.7%	51.9%	44.8%	41.1%	80.6%	80.7%	81.1%	78.7%	79.4%	79.7%
MidCentral	66.2%	66.7%	65.7%	68.1%	70.4%	67.8%	56.4%	54.1%	52.3%	78.3%	78.6%	78.2%	76.7%	77.0%	76.4%
Hutt Valley	68.7%	69.6%	68.8%	66.3%	67.2%	68.5%	66.9%	67.1%	65.3%	74.7%	75.7%	75.9%	73.6%	74.6%	74.7%
Capital and Coast	67.8%	67.5%	66.9%	67.7%	68.5%	69.0%	61.0%	58.7%	56.6%	72.6%	72.4%	71.6%	72.0%	71.9%	71.2%
Wairarapa	71.5%	70.4%	70.4%	70.8%	63.6%	59.7%	49.3%	57.3%	57.3%	75.8%	78.5%	80.9%	75.4%	77.6%	79.6%
Nelson Marlborough	76.6%	72.8%	74.5%	68.6%	67.8%	60.7%	45.6%	45.6%	44.9%	80.9%	80.0%	78.7%	80.7%	79.6%	78.4%
West Coast	67.9%	68.7%	70.2%	32.0%	50.0%	42.3%	56.6%	55.2%	54.0%	77.5%	76.3%	76.3%	76.9%	75.9%	76.0%
Canterbury	70.1%	69.7%	70.4%	63.6%	63.4%	64.6%	50.5%	49.9%	48.7%	76.0%	76.4%	75.2%	75.6%	75.9%	74.8%
South Canterbury	66.7%	65.5%	62.7%	55.6%	62.5%	70.0%	29.4%	31.0%	29.2%	77.0%	77.6%	76.4%	76.5%	76.9%	75.7%
Southern	68.6%	67.9%	69.1%	63.2%	62.7%	59.5%	41.6%	39.7%	35.5%	75.9%	76.5%	71.7%	75.4%	76.0%	71.5%
<b>National</b>	<b>65.9%</b>	<b>66.1%</b>	<b>66.8%</b>	<b>70.7%</b>	<b>73.2%</b>	<b>74.7%</b>	<b>61.6%</b>	<b>60.9%</b>	<b>59.9%</b>	<b>72.5%</b>	<b>72.7%</b>	<b>72.0%</b>	<b>71.7%</b>	<b>72.0%</b>	<b>71.6%</b>